Michael He

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EDUCATION

University of Virginia — Charlottesville, VA

Aug 2022 - May 2026

Bachelor of Science in Computer Science, Minor in Data Science

Dean's List, GPA: 3.94

Relevant Courses: Data Structures and Algorithms, Computer Systems Organization, Discrete Math and Theory, Linear Algebra, Software Engineering, Cybersecurity, Data Design, Statistics, Machine Learning, Reinforcement Learning, Natural Language Processing

TECHNICAL SKILLS

Languages: Python (5 years), Java (6 years), JavaScript/TypeScript (4 years), HTML/CSS (4 years), C++ (2 years), SQL (1 year) Frameworks: React.js/Next.js, Node.js, Tailwind CSS, Spring Boot, Material-UI, JUnit, express, Django, Symfony, PyTorch, scikit-learn Developer Tools: Git, GitHub, Gradle, Heroku, Github Actions, Postman, Terraform, Jira, Confluence, Datadog, CircleCI, Harness, Kubernetes, Rancher, SQLite3, AWS DynamoDB, AWS S3, AWS EC2, Figma, OpenAI API, Discord API, Postgresql, AWS Cloudfront, AWS Lambda, MySQL, NoSQL, Unix

Soft Skills: Communication skills, Teamwork, Time management, Problem-solving, Motivated, Active listener, Disciplined, Attentive

Relevant Work Experience

Software Engineer Intern

May 2024 - Sep 2024

GOBankingRates

Los Angeles, CA

- Ensured high availability and performance with a 99.97% uptime by maintaining a mission-critical internal codebase used by over 2000 banks.
- Completed **over 15 Jira tickets**, contributing to the successful development and deployment of software features and improvements.
- Delivered 10+ new features and improvements by working with cross-functional teams.
- Reduced time to find a error by 75% by utilizing Datadog to monitor and report errors for kubernetes cron jobs.
- Developed and deprecated 3 API endpoints for image generation using Express.js, optimizing functionality.
- Engaged in daily stand ups and regular one-on-one meetings with the manager following an agile methodology.
- Leveraged Gemfury and **Docker** for local project execution and successful deployment to production environments.
- Configured company codebases using Windows Subsystem for Linux (WSL) to enhance development workflows.
- Employed Terraform for infrastructure as code to manage AWS CloudFront caching policies, enhancing content delivery efficiency.
- Updated ReadMes and documentation in confluence to support installation on ARM Macs, ensuring comprehensive guidelines.

Software Engineer Intern

Jan 2023 – Mar 2024

Runway

Atlanta, GA

- Contributed to Runway's place in the top 25 startups to watch in the 'Silicon Valley of the South' and a \$5 million evaluation.
- Produced production level code to manage over 2000 college students and businesses.
- Interacted with other developers to manage and build over 20 user interface components and pages using Next.js.
- Partnered with developers to build 5+ Spring Boot RESTful API routes hosted on an EC2 instance to organize over 200 business projects.
- $\bullet \ \ {\rm Accomplished} \ \ a \ \ {\bf 30\%} \ \ {\bf improvement} \ \ {\rm in} \ \ {\rm website} \ \ {\rm loading} \ \ {\bf speed} \ \ {\rm and} \ \ {\bf a} \ \ {\bf 25\%} \ \ {\bf increase} \ \ {\rm in} \ \ {\rm user} \ \ {\bf engagement} \ \ {\bf with} \ \ {\bf desktop} \ \ {\bf and} \ \ {\bf mobile}$ devices by leveraging DynamoDB and S3 for data retrieval and storage, and utilizing Tailwind to create responsive layouts when developing website components.
- Collaborated with project managers, UI/UX designers, and 3 developers to define project goals, requirements, and timelines.

Relevant Projects

HooGrades | Next. is, Tailwind CSS, AWS Lambda, AWS Dynamodb, AWS S3, AWS EC2, OpenAI API | Team Project

Mar 2024

- Participated in a 24 hour hackathon competing against a field of 700 contestants.
- Developed a full-stack SaaS website using AWS Lambda serving as an API gateway with Next.js as the frontend.
- Improved the website's interactivity and visual appeal by 50% by integrating Framer Motion to incorporate fluid animations.
- Spearheaded the UI/UX design using Figma for HooGrades and utilized OpenAi's vision API to grade students' work.
- Implemented a robust backend architecture on AWS, using services such as Lambda, DynamoDB, S3, and EC2, ensuring scalability, reliability, and high performance of the HooGrades platform.
- Facilitated team collaboration and effective version control using GitHub, leading to streamlined development processes, efficient resolution of merge conflicts, and maintenance of high-quality code standards.

CheapGPT | Node.js, Discord API, OpenAI API, SQLite3 | Personal Project

Jun 2023 - Present

- Launched a Node.js based Discord bot to allow users to interact with ChatGPT 4 with vision in a server setting.
- Continuously maintained and updated the Discord bot to ensure optimal performance and scalability.
- Generated a file directory system when the text exceeded the Discord character limit.
- Implemented commands for users and allowed users to create multiple conversations.

LEADERSHIP EXPERIENCE

Technical Interviewing Workshop Lead

Sep 2024 – Present

University of Virginia

Charlottesville, VA

- Led a workshop 3 times a week for over 100 UVA students by walking through common data structures and algorithm problems.
- Facilitated whiteboarding sessions to collaboratively work through system design challenges and tradeoffs.
- Provided actionable tips for each stage of the interview process based on personal experience and industry best practices.